

# Background on CDPS

## Introduction

The *California Dietary Practices Surveys (CDPS)* is the most extensive dietary and physical activity assessment of adults 18 years and older in the state of California. *CDPS* was designed in 1989 and is administered biennially in odd years. This survey is housed at the California Department of Public Health's *Network for a Healthy California (Network)*. The *CDPS* was designed to monitor dietary trends, especially fruit and vegetable consumption, among California adults for evaluating their progress toward meeting the 2010 Dietary Guidelines for Americans and the Healthy People 2020 Objectives.

## Survey Questions

Fruit and vegetable consumption was collected using a simplified 24-hour recall which queried about each meal on the previous day, including breakfast, lunch, dinner, and all snacks. Respondents were asked if they ate each meal or any snacks and whether any fruit or vegetable was consumed at each eating occasion, including mixed foods. If so, the respondent was asked to name the item, including major fruit or vegetable ingredients; and identify how many servings of it were eaten. A serving was defined to the respondent as "whatever you think of as a normal portion for yourself." Only 100% juices were counted, and legumes (beans) were excluded from tabulation of fruit and vegetable totals. The consumption questions are followed by questions that assessed motivations, barriers, knowledge, attitudes, and behavior related to healthy eating and health practices.

Consumption of foods high in dietary fibers (whole grain breads, tortillas, cereal, and beans), consumption of milk products (milk, yogurt, cheese, and frozen desserts), soy, and high fat/high sugar foods (deep fat fried foods, pastries, and desserts), were also reported. Respondents were asked whether they consumed any of these food items on the previous day. Here, servings were typically described individually for each food item in the question. If a respondent reported consuming milk, cheese, frozen desserts, the type was also asked. For example, "specify whether the item was regular, reduced fat, low fat, or nonfat."

Questions about meals eaten outside of the house and grocery shopping habits were also added as modules on the *CDPS* survey. All respondents were asked how often they ate out-of-home at a restaurant, cafeteria, or fast food establishment on the previous day, specifically querying if any of the meals were at a fast food establishment, such as McDonald's or Taco Bell.

Though the *CDPS* has been known, primarily, as a dietary survey, it also collects data on other factors associated with eating behaviors. Between 1995 and the present, questions about food security, *CalFresh* and WIC participation, physical activity, height and weight, worksite and neighborhood environments, food shopping, and policy were added.

For continuity and quick reference, tables that have remained the same or similar across years have maintained their historical table number. Because of this, as well as the addition and deletion of various questions throughout the years, there may be gaps in table numbers or some tables may have subparts (i.e. a, b).

## Sampling Methods

Using a list of participating *CalFresh* households and random digit dial, approximately 1,400-1,500 adults (ages 18 and over) were interviewed via phone survey between the months of June and October. Demographic data included gender, age, ethnicity, education level, income, physical activity level, overweight status, and food stamp eligibility status. Data were oversampled for low-income adults to provide greater sensitivity for analyzing trends among our target population.

## Statistical Analysis

Data were weighted to the 2000 United States Census in order to provide representative data for the state as a whole. The inclusion of a low-income oversample required that the data also be weighted for

income; and to be consistent with *CDPS* collected in previous years we used income-by-ethnicity-by-age census data. Given these conditions, the working assumption was that, for a given ethnic and age group, the income distribution for males and females were the same such that there was a similar proportion among males and females within an ethnic-age category that were low-income.

### **Applications**

Recent applications of the survey data have been to guide the development and enhancement of the *Network for a Healthy California* and its targeted statewide social marketing campaigns. For example, data on fruit and vegetable consumption and physical activity or specific demographic groups have helped the campaigns identify barriers and facilitators towards achieving recommended health behaviors by the target audience. The data have also enabled the *Network* to track improvements in fruit and vegetable consumption and physical activity corresponding to the total impressions generated by the campaigns.

### **Statistical Notes**

- Mark Hudes, Ph.D., the consultant statistician to the *Network*, conducted the statistical analysis.
- Statistical significance was indicated if differences were detected at the  $p < .05$  level or greater.
- Variables which were either continuous or ordinal and summarized as means were analyzed for differences between demographic subgroups using either t-test or one-way ANOVA. The t-test was employed to compare males to females. The one-way ANOVA was employed to compare differences by ethnicity, education, income, and age within sex. If statistically significant, the
- ANOVA was followed up with Tukey's Standardized Range Test at a procedure-wise error rate of five percent.
- The *CDPS* data tables provide bivariate relationships unadjusted for any other variables.
- Variables that were dichotomous or categorical and summarized as proportions were examined for differences among demographic subgroups using Chi-Square test of independence.
- A respondent was classified as meeting the physical activity recommendation if he or she reported attaining at least 75 minutes of vigorous or 150 minutes of moderate or vigorous physical activity at least five days a week.
- A respondent was considered "Overweight/Obese" if his or her Body Mass Index (BMI) was  $\geq 25$ .
- If a cell states "Insufficient for Analysis" this implies there are  $< 50$  subjects in the demographic group, and thus, these results cannot be generalized to the group as a whole.
- Statistical limitations: Caution should be taken when significance of a given comparison is significant at only  $p < .05$ . Results where  $p < .01$  and  $p < .001$  are less likely to be spurious.

### **Technical Assistance**

For technical assistance regarding the *CDPS*, contact Amanda Linares, MS at [Amanda.Linares@cdph.ca.gov](mailto:Amanda.Linares@cdph.ca.gov)